

BREAKTHROUGH

Volume VII, No. 2 A Publication of the Professional Division of The Monroe Institute Spring 1989

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EMERGENCY SERIES WITH THREE SURGERY PATIENTS

by Suzanne E. Jonas, Ed.D. and Juan C. Penhos, M.D., F.A.C.S.

Dr. Jonas is a private transpersonal therapist focusing on the effects of music and Hemi-Sync on physiological symptoms and is a member of The Professional Division. Dr. Penhos is currently in the solo practice of General Surgery in Springfield, MA.

The following 3 cases were the first ones done by ourselves as a collaborative effort. They represent a variety of responses from slight to major. The patients were introduced to the concept of Music/Sound Therapy by Juan during an office visit. If they were receptive to the idea, he notified Suzanne who then contacted the patient. In an intake interview, she introduced them to Hemi-Sync and the *EMERGENCY SERIES*. They were instructed to listen to Tape 1 (*Pre-Op*) at least once a day prior to surgery, if not more. Tape 2 (*Intra-Op*) would be listened to during the operation, and Tape 3 (*Post-Op*) put into the Walkman by Juan when he had finished and the patient was being transferred to the Recovery Room. (Tape 3 was taped in its plastic case to the back of the Walkman.) The patients were instructed to use Tape 4 (*Recovery/Pain Control*) if they felt any discomfort, before asking for any medications (the attending nurses were also alerted to offer the patient the tape before giving medications). Tape 5 (*Energy Walk*) was to be listened to if restless or bored. After signing a contract, the patients were given a Sony Walkman with an auto reverse feature and the 5 tapes to take home.

Patient #1 - female, age 75, gall bladder surgery - was very receptive to the program and was eager to "help others by using this." As Tape 1 was missing, she was given *Deep 10 Relaxation*, which she listened to 2 times a day for the 6 days prior to the surgery. She was very calm before entering the OR and needed less muscle relaxant than normal during the procedure. In the recovery room she was the only quiet one: she awoke as if from a nap, very calm with no agitation or

nausea. She had less than average pain medication in the recovery room and on the floor she required none for the rest of her hospitalization. She used Tape 4 twice and then asked if she could go back to the first tape (*Deep 10 Relaxation*). She was ready to eat within 24 hours, fairly unusual; and her stay was reduced to 3 days (national average: 7-10 days). She continued to use *Deep 10 Relaxation* at home intermittently. Her follow-up exam showed excellent spirits, a good level of energy and prompt return to normal activity. This patient was very enthusiastic, committed, and very pleased with her experience. She said she "really felt differently after listening to the first tape (*Deep 10 Relaxation*) - more relaxed."

Patient #2 - female, age 37, complete hysterectomy - was outwardly enthusiastic about using the tapes. Prior surgery one year ago was a "horrendous" experience which she was greatly fearful of repeating. At that time, she had a great deal of vomiting in the recovery room and nausea (6 hours) afterwards, pain, and a slow recovery. She attempted to listen to Tape 1 once a day for the 8 days prior to surgery. However, she found it difficult to "find time with all the preparations for going into the hospital," and would enumerate at great length. (She probably listened to the tape 4 or 5 times.) She was calm before entering the OR, and in the recovery room where she experienced pain but was not as sick as prior surgery or as agitated, vomiting only once. She requested the average amount of pain medications, having tried Tape 4 once. "They put me to sleep" and "I'm not sure they work," were her responses to the nurses who urged her to use the tapes. She did listen to Tape 1 after the 3rd day and sporadically at home. Compared to her previous surgery which was also pelvic but much less extensive, she had a shortened hospitalization (3 days, usual being 5-7), better spirits, less reaction to medications, and an overall quicker recovery. Her follow-up exam confirmed an overall improved post-op course, in spite of the major nature of the surgery, especially when compared to the previous course!

Patient #3 - female, age 60, gall bladder - was very open to the process as explained in the intake interview. She commented, "I'm a very easy subject for hypnosis," although she has had no experience with it! She listened to Tape 1 once a day for 5 days prior to surgery. She was calm going into surgery and in the recovery room where she awoke quietly, experienced very little pain, and no nausea or retching. On the floor she used Tape 4 once a day for 2 days, and Tape 5 once. She received 3 doses of intra-muscular pain medication the first 24 hours post-op, then only twice by mouth; that was all she needed during hospitalization. She commented: "That number 5 was a doozy; very enlightening - VERY relaxing" (she would not comment further), and "I didn't listen as much as you

would have liked me to - I asked for a sleeping pill each night." Her stay was also shortened to 3 days. At home she listened to Tape 1 "a couple of times," but "was too busy with company to get much quiet time." Her follow-up exam indicated prompt return to normal activity and good spirits.

Suzanne's comments: These 3 cases are good examples of the effectiveness of the *EMERGENCY SERIES*, especially Tapes 1, 2, 3. I feel that the amount of effect is directly related to the belief system and commitment of the patients. Subsequent cases with other surgery patients also support this. Regardless, all of the patients did experience some improvement in the normal effects characteristic of major surgery. I feel strongly that the use of the ES tapes should be a part of everyone's experience in surgery and am attempting to convince other surgeons; most are not even willing to listen. At this writing, we are submitting cases to the patients' insurance companies; Prudential paid 95% and Medicare paid 34%, others have yet to respond. One other problem with regards to measuring drugs given in the OR has surfaced. It seems to be common practice for anesthesiologists to routinely give drugs during surgery with little regard for whether the patient really needs more or not. This "cookbook" approach is therefore difficult to measure in terms relative to our monitoring.

Juan's comments: The emotional benefits derived from the tapes are clear: patients' pre-operative anxiety, normal for major surgery, melts away. The patients are actually happy and smiling, making them stand out in the pre-op area as well as in the recovery room. The real bonus, however, is a markedly shortened hospitalization, less use of pain medication, and a quicker return to normal activity, difficult to measure, but easily observable.

HEMI-SYNC: A PROMISING NEW TECHNOLOGY FOR PERSONAL GROWTH

by Ralph C. Wiggins, Ph.D.

Dr. Wiggins is a licensed clinical psychologist practicing in Richmond, VA. He has been a TMI Professional Member since October of 1987.

Wilma had originally been referred to me because of high levels of stress due to job dissatisfaction, marital problems, and family pressure. We had initially made considerable progress in stress reduction, but it had gradually become clear that something was inter-

fering with our work. It appeared that buried in her unconscious was some kind of memory or experience which was generating anxiety and was somehow related to her problems. For several months we had been trying a variety of techniques to access this material, but each time we approached it her anxiety would become so great that we would have to back off.

I then decided to try using *Metamusic Eddys* Hemi-Sync audio tape with her. I had recently learned of the Hemi-Sync technology and The Monroe Institute. I attended a professional meeting there and learned that some psychotherapists using these tapes with clients had found that they considerably enhanced the process of therapy. From the very beginning, Wilma found the tape so calming that I gave her one to take home. Tension and anxiety had been causing insomnia, so I suggested that she try playing the tape at night to see if it would help her get to sleep.

The following session she came in very excited. The first few nights the tape helped her to get to sleep quickly. Then one night she awoke about 3:00 a.m. She began playing the tape as usual, but instead of going to sleep, she had a most unusual experience. She found herself suspended in the air above her grandmother's back yard, watching herself at the age of four or five being sexually abused. She was able to become aware of this memory without experiencing any of the anxiety which had previously been blocking us from it. As she continued to use the tape, more of the details came into awareness, including the fact that the abuser was a close relative and that she tried to tell her mother, but her mother would not believe her. Recollection of this buried memory became a turning point in her therapy.

A revolution is occurring today in what we know about the brain. Neuro-scientists say that we have learned more about it in the just the last ten years than we learned in all the previous ages. One of these recent discoveries is synchrony, or the state of whole-brain thinking. Under ordinary circumstances, the left and right hemispheres of our brain operate pretty much independently. However, in certain extraordinary mental states, such as deep meditation or increased creativity, regions of both hemispheres shift into a single, coherent rhythm, operating in unison. Our brain seems to have more power when it is operating in this synchronized state.

Robert Monroe, founder of The Monroe Institute in Faber, Virginia, has for some years been working on the use of sound to influence brain wave patterns. In 1975 he acquired the patent for psycho-physical entrainment of sound patterns. His work is based on the premise that certain sound patterns produce what he refers to as a *Frequency Following Response* in the electrical activity of the brain. When separate signals

are fed into each ear using stereo headphones—for example 400 Hz. (cycles per second) into one ear and 410 Hz. into the other—the two hemispheres of the brain cooperate together to produce a third signal, a binaural beat which is the difference between these two signals—in this case, 10 Hz.

This third signal is not an 'actual' sound, but rather an electrical signal which the brain 'thinks' it hears. When this signal is within the frequency range of brain waves, regions within the two hemispheres tend to produce brain waves of that frequency. Moreover, the brain wave patterns in these regions appear to be synchronized with each other, hence the term hemispheric synchronization, or Hemi-Sync for short. Monroe has discovered that, if you know the brain wave pattern associated with a particular mental state, you can use Hemi-Sync to generate that pattern in an individual. Furthermore, creating the brain wave pattern enables the individual to experience that mental state. Once experienced, an individual can learn to reproduce this state at will.

Monroe has developed a number of Hemi-Sync audio cassette tapes for a variety of purposes. I have been using some of these tapes both personally and with clients. My personal experience with the tapes has been that initially the effect was relatively subtle, but I now clearly experience a calm, relaxed, detached, hassle-free state which seems to endure long after listening. My associates have remarked on the changes they have noticed in my behavior. Neither I nor any of my other clients has yet had as dramatic an experience with the tapes as Wilma reported.

The most general effect reported by virtually all of my clients is calmness and relaxation. So far I have observed positive results in using the tapes with clients for insomnia, stress reduction, and increased self-awareness, and some remarkably favorable results in controlling headaches and back pain. It is interesting to me that the relaxed detachment produced by the tapes appears to correspond with descriptions I have read of the mental state resulting from deep meditation.

After using Hemi-Sync tapes for slightly more than a year, I am both pleased and excited with the results I have been experiencing both personally and with my clients. I am intrigued with the idea of using technology which is accessible to everyone to effect positive changes in brain wave activity, thus facilitating positive changes in mental and emotional states. I look forward to discovering further benefits as I continue to explore and work with Hemi-Sync.

HEMI-SYNC & SNORING

by J. Edwin Carter

Snoring and the common cold probably vie for top billing as ailments which cause the most human misery and which have no cure.

No one knows the number of good amateur snorers, but there are millions of professionals, people who not only wake up everyone else but who wake themselves with their snoring. Despite the sleep clinics, snoring studies, and snorers' support groups, no one has been able to lay a 'gag' on a world class snorer. The guilotine seems the only way.

Finally there is hope. Finally there is a cure—almost. In Hemi-Sync we have a dramatic story—almost. It only needs a dramatic ending.

Encouraged by the power of Hemi-Sync when teamed with a good 'talk tape', I decided to pit it against a world class snorer—me.

Last year I bought a voice-actuated tape recorder, and one night I set it up with the idea of finding out if I talked in my sleep as had been alleged on occasions. I found out that the recorder was much more sensitive to snoring than it was to any small talk that might have occurred. What I had the next morning was 90 minutes of solid snoring in a recorder that had run out of tape. After a lot of playing around with the problem, I finally came up with the right location and the right sensitivity level to obtain reasonably reproducible results. I averaged a number of readings over a two month period and came up with about 80 minutes of lusty snoring in the course of eight hours of sleep. This was converted to a snore index of 10 minutes of snoring per hour of sleep. This is where matters stood in December, 1987, just before this story starts.

In January of 1988 I completed the GATEWAY VOYAGE at The Monroe Institute and Hemi-Sync entered the picture. During the weeks after I returned home, my wife began to note that I had been changed by the experience. One thing she said was that I didn't snore as loud or as much as before. This got me thinking, and I began again measuring my snore index and pondering ways to bring it down. The following tabulation shows what happened.

		SNORE INDEX
BASE LEVEL	DECEMBER 87	10.0
GATEWAY VOYAGE PROGRAM	JANUARY 88	
AVERAGE INDEX	MARCH 88	6.0
BEGAN TALK TAPE	JUNE 88	
COMPLETED H-PLUS PROGRAM	JUNE 88	5.0
ADDED HEMI-SYNC	END OF JUNE	
AVERAGE INDEX	JULY 88	2.6
AVERAGE INDEX	AUGUST 88	2.2
AVERAGE INDEX	SEPTEMBER 88	2.0

The GATEWAY VOYAGE seems to have had a

significant effect on a health problem, but the effect of combining Hemi-Sync with a 'talk tape' was even more dramatic.

These results were exciting, but still left me with a problem. While 16 minutes of snoring followed by 7 hours and 44 minutes of silence would be great, a half minute of lusty snoring every 15 minutes for 8 hours is not at all great. Unfortunately my 16 noisy minutes were spread fairly evenly over the sleep period. Thus we need a powerful tool to provide a dramatic ending. Could H-PLUS deliver the final knockout blow and usher us into a bright new snore-free world? I haven't tried it yet because I don't know if there is an appropriate H-PLUS function. Does anyone have a suggestion?

PHYSIOLOGICAL MONITORING at THE MONROE INSTITUTE

by F. Holmes (Skip) Atwater, Coordinator,
Brainmapping Project

The J&J Enterprises 330-I Psychophysiological Monitoring computer system obtained to support the Brainmapping project also allows us to do computerized physiological monitoring of subjects.

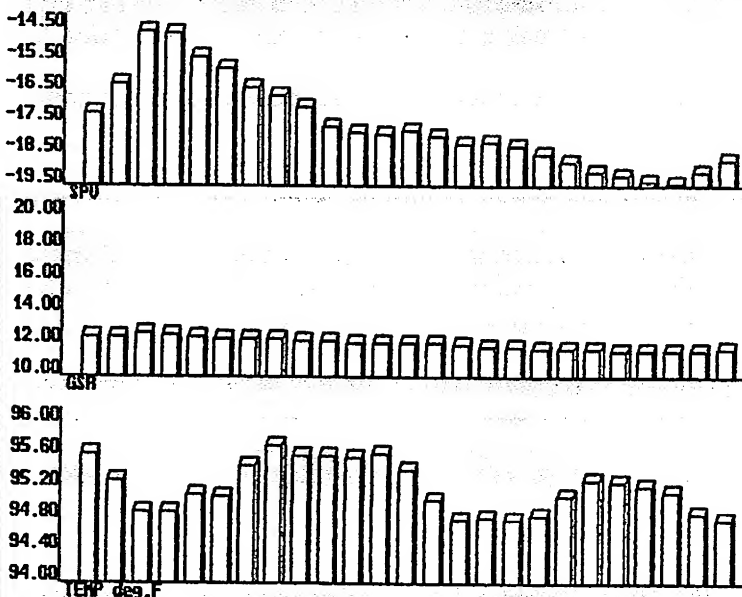


ILLUSTRATION 1: This particular 25 minute graph relates to an individual's construction and use of the Energy Bar Tool. Notice the subjective episodes depicted by SPV animation in the absence of GSR disturbances. Notice too, the fluctuation in the individual's temperature as the on-tape EL exercises change.

Electrodermal activity has two mechanisms of generation: that due to sweat gland activity (sudorific) and that due to other causes (nonsudorific). It is important to discriminate between the two mechanisms. Sudorific skin potentials have long been associated with levels of anxiety. There is reason to expect nonsudorific skin potential levels to be an important factor in embryogenesis, tissue regeneration and atypical growth. Early work which associated nonsudorific potentials with changes in consciousness (e.g., sleep and hypnosis) has been inconclusive because sudorific skin potentials were not taken in to account (see note, below).

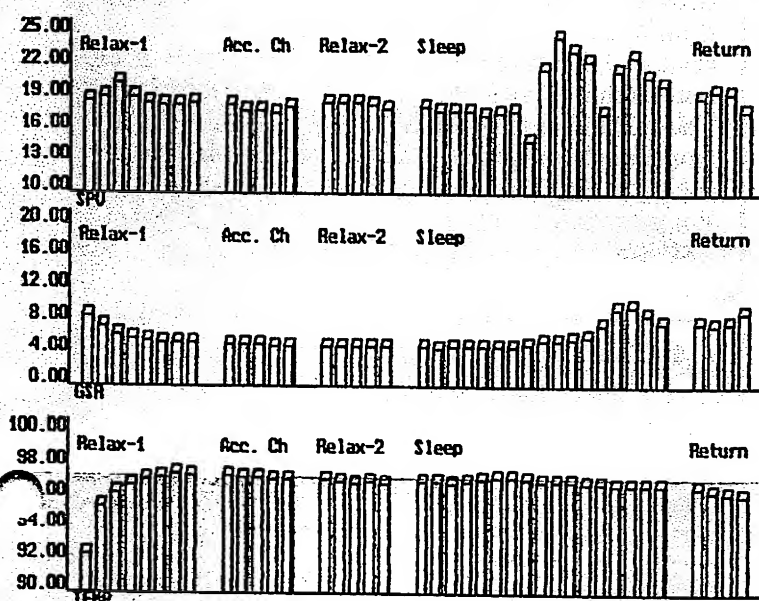


ILLUSTRATION 2: Notice the lack of SPV animation during the first segments of this H Plus Brain Repair and Maintenance exercise. This is a characteristic acquiescent pattern for on-tape activities not requiring active participation. After the H Plus tape ended, the individual reported experiencing what felt like electrical sparks charging across her corpus callosum during the sleep phase of the H Plus tape.

In the case of sudorific activity, skin resistance or its inverse, skin conductance, is measured by applying a constant current through two electrodes placed on the skin. Changes in resistance of short duration typically reach a peak in about one or two seconds and are referred to as skin resistance responses; these are also called galvanic skin responses (GSR). The general amount of resistance that changes slowly is called skin resistance level.

In the case of nonsudorific activity, the potential difference (voltage) between two electrodes on the skin when no current is applied is measured. Potential differences of short duration are called skin potential responses. Potential differences of long duration are

referred to as skin potential levels. Records of these nonsudorific variables are referred to as skin potential voltage (SPV) measurements.

Here at TMI, subjective episodes in consciousness seem to be indicated by SPV animation in the absence of GSR disturbances. Additionally, discrete changes in perspective are occasionally indicated by shifts in the polarity of the SPV.

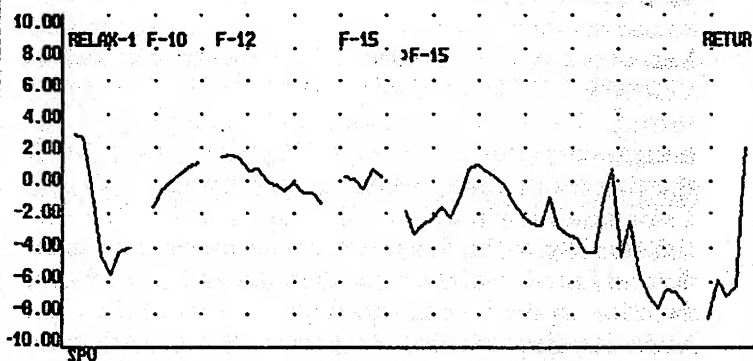


ILLUSTRATION 3: This SPV graph portrays an individual's Explorer Session (RPE-27). The active SPV changed polarity several times as she experienced a variety of perspectives.

Peripheral warming has proven to be a reliable biofeedback indication associated with theta brain wave states. On occasion individuals have been known to move into a theta brain wave rhythm as a result of warming of the hands (to above 95°F and maintaining that temperature for a few minutes). This same effect seems to hold true here at TMI. Peripheral (hand and finger) temperature generally rises above 95°F as states of consciousness favorable to perceptual experiences arise.

NOTE: If SPV is positive then any synchronous GSR - SPV movement in the opposite direction is representative of GSR activity and not an SPV response. Conversely, if SPV is negative then any synchronous GSR - SPV movement in the same direction is representative of GSR activity and not an SPV response.

HEMI-SYNC AIDS IN STROKE RECOVERY

Frank Anders, Jr., M.D.

Dr. Anders is an orthopedic surgeon practicing in Ville Platte, Louisiana. He has been a member of TMI's Professional Division since July of 1987.

The patient is a 58 year old man who had a left sided CVA in December of 1985. He suffered a complete

right hemiplegia. This quickly converted to a right hemiparesis with almost complete dismotor and sensory dysfunction of the right upper extremity and only about 10 to 15 percent function of the right lower extremity. He had complete expressive aphasia. Understandably, for a man that young, he also was very despondent following this stroke. I first saw him in January of 1986, and followed him for several months, prescribing physical therapy, but seeing little or no increase in active function. In May of 1986, I spoke with him about the possibility of using the Hemi-Sync *STROKE RECOVERY SERIES* tapes provided through The Monroe Institute professional branch and he agreed to use them. He started using the tapes in the first part of June 1986, and in the middle of June, I saw him on a routine follow-up visit. For the first time in six months, I began to notice an increase in his deltoid function of the right shoulder and initial motor function in the biceps and finger flexors of the right hand. He also stated at that time that he felt that the tapes had made a great difference. For the first time since I had been seeing him, he was able to express these things to me in a continuing, flowing fashion without halting, frustrated speech.

In July of 1986, his deltoid function continued to improve and in August of 1986, for the first time, the muscles which controlled the dorsiflexion of his right foot began to show function. He had been in a fixed ankle brace until then and began walking with only an elastic ankle support. He continued to use the tapes throughout his recovery. By August of 1987, he had completely lost the footdrop deformity of his right foot and ankle. Of course, he still has some muscle and sensory disfunction, but is now able to ambulate without orthotic or supportive assistance and is able to speak again fluently, without the frustration of the expressive aphasia. This, of course, is a case study of one and is therefore statistically insignificant. However, in treating many stroke patients in the past ten years, I have not seen such a dramatic change in the recovery of any patients previous to the use of these tapes. Whatever you are doing seems to be working, so keep up the good work.



SEARCH FOR GIFTED and TALENTED SUBJECTS

Are you a prodigy, a remote viewer, a healer, or do you have some other special talent?

TMI is looking for gifted and talented subjects to participate in the Brainmapping Project. Applicants should submit a written description of their unusual or extraordinary abilities to TMI for consideration. Where possible, such abilities should be verifiable. Each application will be reviewed for possible benefit to TMI. TMI does not intend to validate nor test a specific talent. The purpose here is to discover brain wave information related to bona fide talented subjects for the purposes of improving the Hemi-Sync process. For more information contact F. Holmes Atwater, TMI Brainmapping Project Coordinator.

CLASSIFIEDS

WANT TO BUY: Hemi-Sync Synthesizer Model 201B. Contact Edit Rodas Carroll, 1102 Bartlett Street, Houston, TX 77006, 713/526-6830 (home), 713/529-6681 (work).

WANT TO BUY: 201B Hemi-Sync Synthesizer. Contact David Tabler, Post Office Box 874262, Wasilla, AK 99687. Telephone: 907/376-0333.

WANT TO BUY: 201B Hemi-Sync Synthesizer. Michael Bookbinder, Search & Rescue International, 1013 Easy Diamond Blvd., Squadron 358, Anchorage, AK 99515. Telephone: 907/783-2610.

We are undertaking a project to discover how to reprogram the emotional response to disease. If you have ideas or contacts, please call or write Frank or Jeanne Bahnson, 111 E. Lupita Road, Santa Fe NM 87501, 505/986-1104.

The Monroe Institute *BREAKTHROUGH* is published four times annually.

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